

1 **ABSTRACT**

2 The subject matter provides dynamically variable idle time thread
3 scheduling in a device with a high system tick rate. A device based on the subject
4 matter includes an operating system, a set of application program modules, and
5 one or more hardware elements. A thread scheduling mechanism in the operating
6 system schedules threads at a periodic rate. Upon determining that there are no
7 threads to execute, at least a subset of components are deactivated for a dynamic
8 variable amount of time before they are is re-activated. The at least one subset of
9 components are selected from the hardware elements, one or more program
10 modules comprising the operating system, and the like. The dynamic variable
11 amount of time is independent of the periodic rate and based on a sleep state of a
12 set of threads in a sleep queue.
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